

BIOTECHNOLOGY
SYSTEMS
BRANCH



290
03/3

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/079,134
Source: 01PE
Date Processed by STIC: 3/5/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

01PE

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/079,134

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ Wrapped Nucleics
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 ☐ Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 ☐ Misaligned Amino
Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 ☐ Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ☐ Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 ☐ PatentIn 2.0
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 ☐ Skipped Sequences
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(ii) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 ☐ Skipped Sequences
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 ☐ Use of n's or Xaa's
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 ☒ Invalid <213>
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ☒ Use of <220> Sequence(s) All missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 ☐ PatentIn 2.0
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 ☐ Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



Does Not Comply OIPE
Corrected Diskette Needed

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002
TIME: 14:23:06

Input Set : A:\10014010.ST25.txt
Output Set : N:\CRF3\03052002\J079134.raw

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

3 <110> APPLICANT: Nikiforov, Theo T.
5 <120> TITLE OF INVENTION: Methods and Systems for Identifying Nucleotides by Primer Extension

7 <130> FILE REFERENCE: 100/14010
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/079,134
C--> 9 <141> CURRENT FILING DATE: 2002-02-20
9 <150> PRIOR APPLICATION NUMBER: 60/270,667
10 <151> PRIOR FILING DATE: 2001-02-22
12 <160> NUMBER OF SEQ ID NOS: 12
14 <170> SOFTWARE: PatentIn version 3.1
16 <210> SEQ ID NO: 1
17 <211> LENGTH: 22
18 <212> TYPE: DNA
19 <213> ORGANISM: Synthetic *invalid response, see error summary sheet items 10 + 11*
21 <220> FEATURE: *must also explain genetic source in 223*
22 <221> NAME/KEY: misc_feature
23 <223> OTHER INFORMATION: Fluorescein labeled thymidine residue
26 <220> FEATURE:
27 <221> NAME/KEY: misc_feature
28 <222> LOCATION: (22)..(22)
29 <223> OTHER INFORMATION: Fluorescein labeled thymidine residue
32 <400> SEQUENCE: 1

W--> 33 ctgccattat gttaggcatt an 22

36 <210> SEQ ID NO: 2
37 <211> LENGTH: 22
38 <212> TYPE: DNA
39 <213> ORGANISM: Synthetic *Some errors*
41 <220> FEATURE:
42 <221> NAME/KEY: misc_feature
43 <222> LOCATION: (22)..(22)
44 <223> OTHER INFORMATION: Fluorescein labeled cytosine residue
47 <400> SEQUENCE: 2

W--> 48 ctgccattat gttaggcatt an 22

51 <210> SEQ ID NO: 3
52 <211> LENGTH: 22
53 <212> TYPE: DNA
54 <213> ORGANISM: Synthetic *Some errors*
56 <220> FEATURE:
57 <221> NAME/KEY: misc_feature
58 <222> LOCATION: (22)..(22)
59 <223> OTHER INFORMATION: fluorescein labeled thymidine residue
62 <400> SEQUENCE: 3

W--> 63 aggcattcca cgtggaccag gn 22

66 <210> SEQ ID NO: 4

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002
TIME: 14:23:06

Input Set : A:\10014010.ST25.txt
Output Set: N:\CRF3\03052002\J079134.raw

```

67 <211> LENGTH: 23
68 <212> TYPE: DNA
69 <213> ORGANISM: Synthetic Some errors
71 <220> FEATURE:
72 <221> NAME/KEY: misc_feature
73 <222> LOCATION: (22)..(22)
74 <223> OTHER INFORMATION: fluorescein labeled thymidine residue
77 <220> FEATURE:
78 <221> NAME/KEY: misc_feature
79 <222> LOCATION: (23)..(23)
80 <223> OTHER INFORMATION: fluorescein labeled cytosine residue
83 <400> SEQUENCE: 4
W--> 84 aggacttcca cgtggaccag gnn 23
87 <210> SEQ ID NO: 5
88 <211> LENGTH: 30
89 <212> TYPE: DNA
90 <213> ORGANISM: Synthetic Some errors
92 <400> SEQUENCE: 5
93 ttggcctagt aatgcctaac ataattggcag 30
96 <210> SEQ ID NO: 6
97 <211> LENGTH: 30
98 <212> TYPE: DNA
99 <213> ORGANISM: Synthetic Some errors
101 <400> SEQUENCE: 6
102 ttggcatat aatgcctaac ataattggcag 30
105 <210> SEQ ID NO: 7
106 <211> LENGTH: 31
107 <212> TYPE: DNA
108 <213> ORGANISM: Synthetic Some errors
110 <400> SEQUENCE: 7
111 acggtggtcg cctgggtcac gtggaagtcc t 31
114 <210> SEQ ID NO: 8
115 <211> LENGTH: 31
116 <212> TYPE: DNA
117 <213> ORGANISM: Synthetic Some errors
119 <400> SEQUENCE: 8
120 acggtggtcac cctgggtcac gtggaagtcc t 31
123 <210> SEQ ID NO: 9
124 <211> LENGTH: 87
125 <212> TYPE: DNA
126 <213> ORGANISM: Synthetic Some errors
128 <400> SEQUENCE: 9
129 cgcaccacta gtgccaatgg caccaaaaca cctttggca tgtaatgoot aacataatgg 60
131 cagggagttg caaagagtta gcaactta 87
134 <210> SEQ ID NO: 10
135 <211> LENGTH: 87
136 <212> TYPE: DNA
137 <213> ORGANISM: Synthetic Some errors
139 <400> SEQUENCE: 10

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002

TIME: 14:23:06

Input Set : A:\10014010.ST25.txt

Output Set: N:\CRF3\03052002\J079134.raw

140 cgcaccaacta gtgccaatgg caccaaaaca ccctttggca tataatgcct aacataatgg 60
142 cagggagttg caaagagtaa gcactta 87
145 <210> SEQ ID NO: 11
146 <211> LENGTH: 21
147 <212> TYPE: DNA
148 <213> ORGANISM: (Synthetic) *some errors*
150 <400> SEQUENCE: 11
151 taagtgotta ctctttgcaa c 21
154 <210> SEQ ID NO: 12
155 <211> LENGTH: 21
156 <212> TYPE: DNA
157 <213> ORGANISM: (Synthetic) *some errors*
159 <400> SEQUENCE: 12
160 cgcaccaacta gtgccaatgg c 21

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/079,134

DATE: 03/05/2002

TIME: 14:23:07

Input Set : A:\10014010.ST25.txt

Output Set: N:\CRF3\03052002\J079134.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1

L:48 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2

L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3

L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4